Application No.: 10/019,783 Docket No.: SAE-0005

## AMENDMENTS TO THE CLAIMS, COMPLETE LISTING OF CLAIMS IN ASCENDING ORDER WITH STATUS INDICATOR

Please amend the following claims as indicated.

- 1. (Currently Amended) A method for producing a transgenic gramineae <u>plant</u> having iron deficiency resistance, comprising transforming a gramineae <u>plant</u> with a polynucleotide by using a vector pIG121Hm or pBIGRZ, wherein the polynucleotide is selected from the group eonsisting of
  - (A) a polynucleotide encoding an amino acid sequence of SEO ID NO: 1,
  - (B) a polynucleotide encoding an amino acid sequence of SEQ ID NO: 2,
- (C) a polynucleotide which encodes an enzyme exhibiting nicotianamine amino transferase (NAAT) activity and can hybridize with polynucleotide (A) or (B) under stringent conditions of a hybridization buffer comprising 6 x SSPE, 5 x Denhart solution, 0.1% SDS, and 100 mg/ml altered salmon spermary DNA, and a hybridization temperature of 65 degrees, and
  - (D) a an isolated polynucleotide comprising the base sequence of SEQ ID NO. 3.
  - 2. (Canceled).
- (Currently Amended) The method in accordance with according to claim 1, wherein the polynucleotide further comprises a promoter, said promoter being CaMV358.
  - 4. (Canceled).
- 5. (Currently Amended) The method in accordance with according to claim 1, wherein the polynucleotide is encodes a barley naat gene nicotianamine aminotransferase (NAAT).
  - 6. (Canceled).
- 7. (Currently Amended) A transgenic gramineae—with iron deficiency resistance produced through plant comprising an isolated polynucleotide comprising the method in

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accordance with any one base sequence of claims 1 to 3 and 5 SEQ ID NO. 3, wherein said transgenic gramineae plant has resistance to iron deficiency.

- 8. (Currently Amended) A <u>transgenic</u> seed of the transgenic gramineae in accordance with <u>plant according to</u> claim 7, wherein the seed comprises a polynucleotide selected from the group consisting of
  - (A) a polynucleotide encoding an amino acid sequence of SEQ ID NO: 1,
  - (B) a polynucleotide encoding an amino acid sequence of SEQ ID NO: 2,
- (C) a polynucleotide which encodes an enzyme exhibiting nicotianamine amino transferase (NAAT) activity and can hybridize with polynucleotide (A) or (B) under stringent conditions of a hybridization buffer comprising 6 x SSPE, 5 x Denhart solution, 0.1% SDS, and 100 mg/ml altered salmon spermary DNA, and a hybridization temperature of 65 degrees, and (D) a polynucleotide comprising the base sequence of SEQ ID NO. 3.
- 9. (Currently Amended) A <u>transgenic</u> cell of the transgenic gramineae in accordance with <u>plant according to</u> claim 7, wherein the cell comprises a polynucleotide selected from the group consisting of
  - (A) a polynucleotide encoding an amino acid sequence of SEQ ID NO: 1,
  - (B) a polynucleotide encoding an amino acid sequence of SEO ID NO: 2.
- (C) a polynucleotide which encodes an enzyme exhibiting nicotianamine amino transferase (NAAT) activity and can hybridize with polynucleotide (A) or (B) under stringent conditions of a hybridization buffer comprising 6 x SSPE, 5 x Denhart solution, 0.1% SDS, and 100 mg/ml altered salmon spermary DNA, and a hybridization temperature of 65 degrees, and
  - (D) a polynucleotide comprising the base sequence of SEO ID-NO. 3.
- 10. (Currently Amended) A method of growing <u>a gramineae plant</u> in an iron deficient field comprising planting the transgenic gramineae <u>plant</u> of claim 7, or seeds thereof in said field under conditions to promote growth of said <u>transgenic gramineae plant</u>.
  - 11. (Canceled).

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12. (Currently Amended) The transgenic gramineae in accordance with plant according to claim 7, wherein the polynucleotide is encodes a barley naat gene nicotianamine aminotransferase (NAAT).

13. (New) A method of growing a gramineae plant in an iron deficient field comprising planting the transgenic seed of claim 8 in said field under conditions to promote growth of a transgenic plant.